

Form PTO-1449 U.S. Department of Commerce
(REV. 2-82) Patent and Trademark Office

Atty. Docket No.
A31657 PCT USA -
070050.1400

Serial No.
09/674,821

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use several sheets if necessary)

Applicant
David S. Levy

Filing Date
April 20, 2001

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2877

U.S. PATENT DOCUMENTS

*Exam. Init.	Document No.	Date	Name	Class	Subclass	Filing Date if Appropriate
<i>OK</i>	5 0 4 8 9 0 9	09/17/91	Henry et al	385	27	07/27/90
	5 4 1 0 6 2 5	04/25/95	Jenkins et al.	385	28	
	5 3 7 9 3 5 4	01/03/95	R.M. Jenkins	385	46	
	5 5 6 3 9 6 8	10/08/96	Pennings et al.	385	27	
	4 3 6 2 3 5 7	10/07/82	Stockmann et al.	350	96	04/02/80

FOREIGN PATENT DOCUMENT

Document No.	Date	Country	Class	Subclass	Translator Yes No

OTHER DOCUMENTS (including Author, Title Date, Pertinent Pages, Etc.)

<i>OK</i>	"Four-Channel Integrated-Optic Wavelength Demultiplexer With Weak Polarization Dependence", Arjen R. Vellekoop and Meint K. Smit; Journal of Lightwave Technology, Vol. 9, No. 3, March 1991.
	"A New Design for Ultracompact Multimode Interference-Based 2 x 2 Couplers", David S. Levy, Student Member, IEEE, Robert Scarmozzino, York M. Li and Richard M. Osgood, Jr., Fellow, IEEE; IEEE Photonics Technology Letters, Vol. 10, No. 1, January 1998.
	"Extremely Small Multimode Interference Couplers and Ultrashort Bends on InP by Deep Etching", L.H. Spiekman, Y.S. Oei, E.G. Metaal, F.H. Groen, I. Moerman, and M.K. Smit; IEEE Photonics Technology Letters, Vol. 6, No. 8, August 1994.
	"A Very Compact InP-Based Integrated Optic Mach-Zehnder Interferometer with a Delay Difference of 74 ps", R. Baets, C. Wei. G. Dobbelaere, J. Haes, O. van Hoorebeke, T. Tanghe, P. De Dobbelaere, I. Moerman; University of Gent-IMEC, Department of Information Technology (INTEC); X.J.M. Leijtens, A.H. de Vreede, M.K. Smit; Delft University of Technology, Department of Electrical Engineering, The Netherlands; E.G. Metaal, PTT Research, The Netherlands.
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[Handwritten initials]		"Compact Planar 980/1550-nm Wavelength Multi/Demultiplexer Based on Multimode Interference", M.R. Paiam, Student Member, IEEE, C.F. Janz, Student Member, IEEE, R.I. MacDonald, Senior Member, IEEE, and J.N. Broughton; IEEE Photonics Technology Letters, Vol. 7, No. 10 October 1995.
[Handwritten initials]		"Nove. 1xN and NxN Integrated Optical Switches Using Self-Imaging Multimode GaAs/AlGaAs Waveguides"; R.M. Jenkins, J.M. Heaton, D.R. Wight, J.T. Parker, J.C.H. Birbeck, G.W. Smith and K.P. Hilton; (Defense Research Agency (DRA), Electronics Division, St. Andrews Road, Great Malvern, Worcester WR14 3PS, United Kingdom; (Received 24 September 1993; accepted for publication 19 November 1993); Appl. Phys. Lett. 64 (6), 7 February 1994.
[Handwritten initials]		"Compact InP-Based Ring Lasers Employing Multimode Interference Couplers and Combiners"; R. van Roijen, E.C.M. Pennings, M.J.N. van Stalen, T. van Dongen, B.H. Verbeek, and J.M.M. van der Heijden (Philips Optoelectronics Centre, Prof. Holstlaan 4.5656 AA Eindhoven, The Netherlands (Received 27 September 1993; accepted for publication 10 January 1994) Appl. Phys. Lett. 64 (14), 4 April 1994.
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[Handwritten initials]		"Proceedings of SPIE Reprint - Reprinted from Integrated Optic Devices II, 28-30 January 1998, San Jose, California ©1998 by the Society of Photo-Optical Instrumentation Engineers, Box 10, Bellingham, Washington 98227, U.S.A.
[Handwritten initials]		"Planar Monomode Optical Couplers Based on Multimode Interference Effects", B. Soldano, Frank B. Veerman, Meint K. Smit, Bastiaan H. Verbeek, Alain H. Dubost, and Erik C.M. Pennings; Journal of Lightwave Technology, Vol. 10, No. 12, December 1992.
[Handwritten initials]		"Optical Multi-Mode Interference Devices Based on Self-Imaging: Principles and Applications", Lucas B. Soldano and Erik C.M. Pennings, Member, IEEE; Journal of Lightwave Technology, Vol. 13, NO. 4, April 1995.
[Handwritten initials]		"Optical Bandwidth and Fabrication Tolerances of Multimode Interference Couplers", Pierre A. Besse, Maurus Bachmann, H.Melchior, L.B. Soldano, and M.K. Smit; Journal of Lightwave Technology, Vol. 12, No. 6, June 1994.
[Handwritten initials]		"Extremely Small Multimode Interference Couplers and Ultrashort Bends on InP by Deep Etching", L.H. Spiekman, Y.S. Oei, E.G. Metaal, F.H. Groen, I. Moerman, and M.K. Smit; IEEE Photonics Technology Letters, Vol. 6, No. 8, August 1994.
[Handwritten initials]		"Mode-Width Expanders based on the Self Imaging Effect in Tapered Multimode GaAs/AlGaAs Waveguides", W.J. Simpson*, J.M. Heaton, S. Jones, J.C.H. Birbeck, K.P. Hilton, J.R. James* and D.R. Wight, DRA Malvern, Malvern, Worcs, U.K. WR14 3PS; *RMCS Shrivenham, Cranfield University, Swindon, U.K.
[Handwritten initials]		"Scattering in Low-Loss GaAs/AlGaAs Rib Waveguides", R.J. Deri, E. Kapon and L.M. Schiavone, Bell Communications Research, 331 Newman Springs Road, Red Bank, New Jersey 07701-7020; (Received 1 June 1987; accepted for publication 14 July 1987); Appl. Phys. Lett. 51 (11), 14 September 1987.
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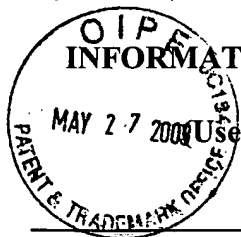
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"New 2x2 and 1x3 Multimode Interference Couplers with Free Selection of Power Splitting Ratios", Pierre A. Besse, Emilio Gini, Maurus Bachmann, and Hans Melchior, Fellow IEEE; Journal of Lightwave Technology, Vol. 14, No. 10, October 1996.

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"A New Design for Ultracompact Multimode Interference-Based 2 x 2 Couplers"; David S. Levy, Student Member, IEEE, Robert Scarmozzino, York M. Li, and Richard M. Osgood, Jr., Fellow, IEEE; IEEE Photonics Technology Letters, Vol. 10, No. 1, January 1998.

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